NEW YORK STATE Integrated Pest Management PROGRAM

Cornell University Cooperative Extension

Elements of IPM for Peppers in New York State

MAJOR PESTS		
Insects	**Diseases**	**Weeds**
European corn borer	Bacterial leaf spot (BLS)	broadleaves
Green peach aphid	Phytophthora	annual grasses
Corn earworm	Cucumber mosaic virus	perennials
	Tomato spotted wilt virus	
	Anthracnose	

A. Site Preparation	**Priority**	**Points**	**Acreage Goal**
1) Review weed map/list of fields to choose appropriate weed control strategies. See the Weed Assessment List available for use in satisfying this element.	M	5	75%
2) Crop Rotation. Plant only in fields where peppers, tomatoes, or cucurbits have not been grown in the previous two years to avoid carryover of disease inoculum	H	10	50%
3) Maintain good soil drainage or plant on raised beds to avoid Phytophthora crown and fruit rot	M	5	50%
4) Soil test at least every three years; fertilize according to recommendation	H	10	100%
5) Plant on plastic mulch with trickle irrigation for weed control and to minimize disease spread	M	5	50%
B. For growers producing their own Transplants			
1) On BLS susceptible varieties: use sodium hypochlorite or hot water treated seed to avoid seed-borne inoculum	L	3	10%
2) Use fungicide treated seed for control of damping-off pathogens	H	10	50%
C. Variety Selection			
1) Use tolerant or resistant varieties whenever possible for controlling bacterial leafspot and viruses	H	10	50%
D. Planting			
1) If using fertigation, apply no more than 50 lb. N at planting and the rest in two or more split applications	M	5	25%
E. Pest Monitoring and Forecasting			
1) Scout to determine the need for cultivation or post-emergent herbicide	L	3	50%
2) Monitor flights of E and Z race ECB and CEW on your farm using recommended pheromone traps and lures or use extension pheromone trap network information.	H	10	100%

3) Scout as recommended for aphids	H	10	100%
F. Pest Management			
1) Calibrate sprayer(s) annually or more frequently as needed.	H	10	100%
2) Use recommended action thresholds for making decisions about applying pesticides for insects and diseases of importance.	H	10	100%
2) Time sprays for European corn borer to peak moth flights after fruit reach walnut size	H	10	75%
3) Choose effective pesticides that have the lowest environmental impact based on overall EIQ. OR Choose effective pesticides that preserve natural enemies based on natural enemy component of EIQ.	M	5	50%
4) Keep records of pest densities, pesticide applications, cultural pest management practices, and biological control techniques used.	H	10	100%
5) If using plastic mulch, cultivate between beds for weed control	L	3	25%
6) Optional: if planting on plastic, plant a cover crop in the aisles for weed control	M	5	10%
G. POST HARVEST			
1) Update weed map/list after harvest to use when planning for next year. See the Weed Assessment List available for use in satisfying this element.	M	5	75%
2) If needed, spot treat perennial weeds with a translocatable herbicide.	L	3	25%
3) Pull and landfill plastic mulch if it was used or re-use for additional season(s)	H	10	75%
4) Disk down crop residue if not re-using plastic mulch	M	5	50%
5) If harvest ends by October 1st establish cover crops for weed control and to scavenge leachable nitrates.	H	10	50%

Total Points:

For growers producing their own transplants: Total = 162; 80% = 129

For growers buying transplants: Total = 149; 80% = 119

REFERENCES... Specific information about the use of these IPM elements can be found in the following publications:

Integrated Crop and Pest Management Guidelines for Commercial Vegetable Production.

Pheromone Traps - Effective Tools for Monitoring Lepidopterous Insect Pests of Sweet Corn. Sweet Corn Insect Pest Fact Sheet 102GFS795.00.

A Method to Measure the Environmental Impact of Pesticides. 1992. New York Food and Life Sciences Bulletin Number 139.

The above reference material can be obtained from county Cornell Cooperative Extension offices

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